



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,362	11/28/2000	Teresa F. Lunt	104136	4303

7590 01/12/2005

Oliff & Berridge PLC
P O Box 19928
Alexandria, VA 22320

EXAMINER

SINGH, SATWANT K

ART UNIT	PAPER NUMBER
----------	--------------

2626

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/722,362	Applicant(s) LUNT ET AL.	
	Examiner Satwant K. Singh	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2004.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 09/02/2004 has been entered and made of record.
Claims 1-26 are pending.

Response to Arguments

2. Applicant's arguments filed 09/02/2004 have been fully considered but they are not persuasive.

With regards to independent claims 1 and 14, applicant argues that Stefik et al. fails to disclose the feature "a policy that determines the forgery protection level for a document". Fig. 5, S501 illustrates the step for printing a digital work on a trusted printer (a digital work is written, assigned usage rights including a print right which specifies watermark information and is deposited in repository 1) (col. 8, lines 10-13). The usage rights of Stefik read on the claimed forgery protection level. The usage rights language of Stefik reads on the claimed policy (these rights are expressed in a rights language) (Appendix A) (col. 8, lines. 44-46). The usage rights language of Stefik is described as the content providers indicating the terms, conditions, and fees for printing documents in a machine-readable property rights language (col. 4, lines 65-67).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

Art Unit: 2626

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Stefik et al (US 6,233,684).

5. Regarding claim 1, Stefik et al disclose a method processing an image of a document including at least one page (reads on trusted printer) (col.3, lines 11-14); determining a forgery protection to be applied to the document (digital work is written, assigned usage rights including a print right which specifies watermark information and is deposited in repository 1, step 501) (col. 8, lines 10-13) based on a policy (usage rights language) (col. 8, lines 44-46) that determines the forgery protection level (usage rights) for the document (col. 8, lines 10-13); and based on the determined protection level, printing at least one watermark (if the digital work has the print right, the printer repository decrypts the digital work and generates the watermark that will be printed on the digital work, step 507) (col. 4, lines 5-38) including copy evidence and tracing information on each page of the document that corresponds to the determined protection level (watermark data typically provides information relating to the owner of the digital work Preventing unauthorized copying of the rendered work) (Abstract, lines 7-13).

6. Regarding claim 2, Stefik et al disclose a method wherein the copy evidence is encoded in the watermark (reads on watermarks are designed to make copies distinguishable from the originals) (col. 5, lines 15-16).

7. Regarding claim 14, Stefik teaches a document forgery protection printing system comprising at least one image processor that processes an image of document including at least one page (reads on trusted printer) (col.3, lines 11-14); at least one server having a print management system and a policy that determines a forgery protection level of the document (The printer repository receives the encrypted digital work and determines if it has a print right, step 506. If the digital work has the print right, the printer repository decrypts the digital work and generates the watermark that will be printed on the digital work, step 507.) (col. 4, lines 5-38); a plurality of printers, each printer able to print the document and able to apply at least one protection level to the document by printing at least one watermark including copy evidence and tracing information on the document that corresponds to the determined protection level (reads on server based trusted printers) (col. 16 lines 58-65).

8. Regarding claim 15, Stefik et al disclose a method wherein the copy evidence is encoded in the watermark (reads on watermarks are designed to make copies distinguishable from the originals) (col. 5, lines 15-16).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2626

10. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik et al in view of Livingston (US 6,621,590).

11. Regarding claim 3, Stefik teaches a method of embedding a document with dynamically generated watermark information which provides information relating to the owner as well as preventing unauthorized copying of the work (Abstract, lines 6-13).

Stefik fails to teach that the watermarks may vary with each page of the document.

Livingston teaches a method where other watermarks have been applied to other pages of the document. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by the teaching of Livingston to put different watermarks on different pages of the document.

12. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik and Livingston as applied to claim 3 above, and further in view of Cyr et al (US 6,138,913).

13. Regarding claim 4, Stefik et al teach a method of embedding a document with dynamically generated watermark. Livingston teaches a method where different watermarks have been applied to different pages of the document.

Stefik and Livingston fail to disclose the chemical composition of the watermarks as well as the location of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46). Additionally, Cyr teaches that

encoded information can be positioned anywhere (col. 5, lines 12-17). Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik and Livingston by using the marking composition taught by Cyr for imprinting the watermarks.

14. Regarding claim 5, Stefik et al teach a method of embedding a document with dynamically generated watermark using data technology such as glyph technology. Livingston teaches a method where different watermarks have been applied to different pages of the document.

Stefik and Livingston fail to disclose the chemical composition of the watermarks as well as the location of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46). Additionally, Cyr teaches that encoded information can be positioned anywhere (col. 5, lines 12-17).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks.

15. Claims 6-13, 19, and 20-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik et al in view of Cyr et al (US 6,138,913).

16. Regarding claims 6, Stefik et al teach a method of embedding a document with dynamically generated watermark information which provides information relating to the owner as well as preventing unauthorized copying of the work (Abstract, lines 6-13).

Stefik fails to disclose the chemical composition of the watermarks

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks.

17. Regarding claim 7, Stefik et al teach that the watermarks are created with embedded data technology such as glyph technology (col. 10, lines 20-23).

Stefik et al fail to teach the chemical composition of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks using glyph technology.

18. Claims 8, 10-11, and 13 are rejected for the same reasons as claim 6.

19. Regarding claim 9, Stefik et al teach that tracing information is encoded in the watermark (reads on the watermark data typically provides information relating to the owner of the digital work) (Abstract, lines 7-13).

Stefik et al fail to teach the chemical composition of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks.

20. Claim 12 is rejected for the same reasons as claim 7.

21. Regarding claim 19, Stefik et al teach a method of embedding a document with dynamically generated watermark information which provides information relating to the owner as well as preventing unauthorized copying of the work (Abstract, lines 6-13).

Stefik fails to disclose the chemical composition of the watermarks

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks.

22. Regarding claim 20 Stefik et al teach that the watermarks are created with embedded data technology such as glyph technology (col. 10, lines 20-23).

Stefik et al fail to teach the chemical composition of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks using glyph technology.

23. Claims 21, 23-24, and 26 are rejected for the same reasons as claim 6.

24. Regarding claim 22, Stefik et al teach that tracing information is encoded in the watermark (reads on the watermark data typically provides information relating to the owner of the digital work) (Abstract, lines 7-13).

Stefik et al fail to teach the chemical composition of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks.

25. Regarding claim 25, as best understood by the language of the claims are rejected for the same reasons as claim 20.

26. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik et al in view of Livingston (US 6,621,590).

27. Regarding claim 16, Stefik teaches a method of embedding a document with dynamically generated watermark information which provides information relating to the owner as well as preventing unauthorized copying of the work (Abstract, lines 6-13).

Stefik fails to teach that the watermarks may vary with each page of the document.

Livingston teaches a method where other watermarks have been applied to other pages of the document.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by the teaching of Livingston to put different watermarks on different pages of the document.

28. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stefik and Livingston as applied to claim 3 above, and further in view of Cyr et al (US 6,138,913).

29. Regarding claim 17, Stefik et al teach a method of embedding a document with dynamically generated watermark. Livingston teaches a method where different watermarks have been applied to different pages of the document.

Stefik and Livingston fail to disclose the chemical composition of the watermarks as well as the location of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46). Additionally, Cyr teaches that encoded information can be positioned anywhere (col. 5, lines 12-17).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik and Livingston by using the marking composition taught by Cyr for imprinting the watermarks.

30. Regarding claim 18, Stefik et al teach a method of embedding a document with dynamically generated watermark using data technology such as glyph technology. Livingston teaches a method where different watermarks have been applied to different pages of the document.

Stefik and Livingston fail to disclose the chemical composition of the watermarks as well as the location of the watermark.

Cyr et al teach a method wherein the watermark is imprinted on the substrate using an ink or other appropriate marking composition containing a fluorescing compound sensitive to radiation (col. 4, lines 43-46). Additionally, Cyr teaches that encoded information can be positioned anywhere (col. 5, lines 12-17).

Therefore, it would have obvious to one of ordinary skill in the art at the time of the invention to have modified Stefik by using the marking composition taught by Cyr for imprinting the watermarks.

Conclusion

31. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rhoads et al. (US 6,744,906, US 6,728,390, and US 6,636,615) disclose two or more digital watermarks, with different watermarks, embedded in a document.

Gutman et al, (US 6, 234,537) discloses a security document with optically excitable dyes for authenticity checking.

Fujiwara (US 6,737,776) discloses an image recording apparatus, which prints a visible watermark superimposed over an original image on recording paper.

Iwamura et al. (US 6,721,438) discloses a deterrent effect for a forgery of an image using embedded predetermined information within a digital watermark.

Yoda (US 6,239,8185) discloses a printing method for embedding a pattern signal.

Daniele (US 5,444,779) discloses a system for utilizing a printable, yet unobtrusive glyph or similar two-dimensionally encoded mark to identify copyrighted documents.

Mori (US 2002/0018233) discloses a data generating device capable of appending different watermarks to corresponding pages.

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2626

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (703) 306-3430. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

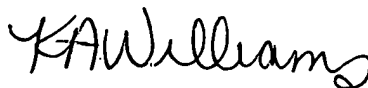
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (703) 305-4863. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Satwant K. Singh
Examiner
Art Unit 2626

sks



KIMBERLY WILLIAMS
SUPERVISORY PATENT EXAMINER